An Effective Evaluation Process for Proposed Information Integration Projects Developed Under IAIMS at the City of Hope

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BACKGROUND A key outcome of City of Hope's (COH) *Integrated Advanced Information Management Systems* (IAIMS) Planning Phase has been the development, testing and implementation of a standard process for evaluating information sharing ideas spawned by members of the COH community. This process supports the goals of (1) achieving maximal levels of information accessibility, compatibility and integration; (2) fostering organizational involvement and cultural change; and (3) prioritizing projects requiring institutional funding. The COH IAIMS organizational structure serves as the pathway for the project evaluation process and IAIMS staff members provide the necessary coordination.

DESCRIPTION

Phase 1: Assessment of Proposed Projects This six-step phase is conducted during the conceptual stage of development of a proposed project.

(i) Submission A proposed project is submitted to the IAIMS staff using the *Suggestion Form for Information and System Sharing Ideas* (available in paper or on the Intranet). This one-page form captures information about the project's concept, goals, benefits and urgency. Proactive efforts are made to identify new projects via the Intranet, COH newsletter, and IAIMS-related groups.

(ii) Initial Review The IAIMS staff reviews each suggestion form to determine overlap with existing projects.

(iii) Registration The project is assigned a registration number and is entered into an electronic IAIMS project tracking database.

(iv) Steering Committee Involvement. The project is submitted to the appropriate COH information systems steering committee (i.e., Finance, Patient Care, Research, Security or Technology). The primary task of the Steering Committee is to appoint a multi-disciplinary assessment team to conduct an in-depth evaluation of the project and to shepherd the project evaluation from this point forward.

(v) Multi-Disciplinary Team Assessment. The role of the Assessment Team is to compile a technical project summary; project a time frame for completion; identify the human, information and technical resources required for implementation; develop a cost estimate and identify resources required; assign a priority score to the project; and to recommend whether or not the project should be implemented. The assessment is conducted using the *Information and System Sharing Project Assessment Form.* The Assessment Team Leader presents the project to the IAIMS Executive Committee.

(vi) IAIMS Executive Committee (EC) Review The EC makes a final determination as to whether the project should be implemented and prioritizes the project from an organizational perspective. The EC decides on the placement of the project within the IAIMS strategic plan, as well as what resources should be allocated for it. The EC reports its decisions (with supporting documentation) to the COH Executive Council for action.

Phase 2: Pre-Post Implementation Evaluation of Initiated Projects

Once a proposed project is initiated, a pre-post implementation evaluation is conducted to measure the impact of the new system, with an emphasis on time, effort and quality. The evaluation is designed using the *Pre-Post Evaluation Study Outline,* which documents the study overview, population, design, endpoints, sample size requirements and analysis plan.

(i) Pre Implementation Evaluation

During the pre-implementation evaluation, a baseline study is conducted to collect data on existing systems and procedures (usually paper and/or manual) that will be replaced by the new system.

(ii) Post Implementation Evaluation

Once the new system is in place, a post-implementation study is conducted using identical endpoints from the pre-implementation evaluation. The pre-and post-implementation data are compared.

EVALUATION

Early in the IAIMS Planning Phase, a special task team was formed to develop this project evaluation process. The evaluation process was then piloted and modified using six proposed projects from various areas (e.g., financial, research, clinical) of varying technical scope (hardware, software, database development). Additionally, an outside expert has been contracted to evaluate this process.

CONCLUSIONS

This evaluation process has used successfully to date on six projects and will continue to be used for all new projects. It has helped to provide comprehensive documentation to inform decision makers, identify and rectify project shortcomings, and further information integration at COH.

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